

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                                    |   |                            |
|------------------------------------|---|----------------------------|
| In re Application of:              | ) |                            |
|                                    | ) |                            |
| Mitsuya KOMAMURA                   | ) |                            |
|                                    | ) |                            |
| Application No.: Unassigned        | ) | Group Art Unit: Unassigned |
|                                    | ) |                            |
| Filed: November 20, 2003           | ) | Examiner: Unassigned       |
|                                    | ) |                            |
| For: DELTA-SIGMA MODULATOR, METHOD | ) |                            |
| OF SWITCHING DELTA-SIGMA           | ) |                            |
| MODULATOR, AND DIGITAL AMPLIFIER   | ) |                            |

Commissioner for Patents  
**MAIL STOP PATENT APPLICATION**

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached PTO-1449. This Information Disclosure Statement is being filed within three months of the filing date of the above-referenced application before the mailing date of a first Office Action on the merits for the above-referenced application.

A copy of each listed document is attached

The following are listed on the accompanying PTO-1449 and are in a language other than English.

a. Japanese Unexamined Patent Publication No. 7-15281. The relevance of this document is discussed at page 2 of the specification of the present application.

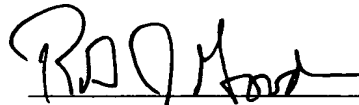
This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed document is material or constitutes "prior art." If it should be determined that the listed document does not constitute "prior art" under

United States law, Applicant reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such document. Applicant further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed document, should the document be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 50-0310.

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

A handwritten signature in black ink, appearing to read 'R. J. Goodell', is written over a horizontal line.

Robert J. Goodell-Reg. No. 41,040

Date: November 20, 2003

**MORGAN, LEWIS & BOCKIUS LLP**  
**1111 Pennsylvania Avenue, N.W.**  
**Washington, D.C. 20004**  
**(202) 739-3000**

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

PTO Form 1449

Attorney Docket No.  
040894-5978Serial No.  
UnassignedApplicant  
Mitsuya KOMAMURAFiling Date  
November 20, 2003Group  
Unassigned**U.S. PATENT DOCUMENTS**

| *Examiner<br>Initial | Document<br>Number | Date | Name | Class | Sub<br>Class | Filing Date |
|----------------------|--------------------|------|------|-------|--------------|-------------|
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |
|                      |                    |      |      |       |              |             |

**FOREIGN PATENT DOCUMENTS**

|  | Document<br>Number | Date          | Country | Class | Sub<br>Class | Translation |    |
|--|--------------------|---------------|---------|-------|--------------|-------------|----|
|  |                    |               |         |       |              | YES         | NO |
|  | 7-15281            | Jan. 17, 1995 | Japan   |       |              |             | NO |
|  |                    |               |         |       |              |             |    |
|  |                    |               |         |       |              |             |    |
|  |                    |               |         |       |              |             |    |
|  |                    |               |         |       |              |             |    |
|  |                    |               |         |       |              |             |    |
|  |                    |               |         |       |              |             |    |

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

J. M. GOLDBERG, "Noise Shaping and Pulse-Width Modulation for an All-Digital Audio Power Amplifier", J. Audio Eng. Soc., Vol. 39, No. 6, pp. 449-460, 1991

Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.